Fall 2019 Levee Maintenance Deficiency Summary Report

Overall LMA & Unit Ratings, including DWR Erosion Survey

San Joaquin River Basin

RD2075	Overall LMA	Total LMA						
Reclamation District No. 2075 McMullin	Rating	Miles						
	U	7.45						
Data di Itara		Maintena	nce Deficiency		Enforc	ement	Design 8 Obsole	
Rated Item	M Miles	U Miles	M + 4U Miles	Threshold %	M Miles	U Miles	M Miles	U Miles
Earthen Levee								
Vegetation	1.46		1.46	19.60%		0.01		
Trim / Thin Trees	0.02		0.02	0.27%				
Encroachments	0.03		0.03	0.40%	0.10			
Animal Control	0.02		0.02	0.27%				
Supplemental								
DRAFT DWR UCIP Field Study					0.06			
DRAFT DWR UCIP LMA Responsibility								
LMA Totals:	1.53	0.00	1.53	20.54%	0.16	0.01	0.00	0.00
Unit No. 01 San Joaquin River RB	Overall Unit	Total Unit						
	Rating	Miles						
RD2075	U	7.45						
Rated Item		Maintena	nce Deficiency		Enforc	ement	Design 8 Obsole	
Rated item	M Miles	U Miles	M + 4U Miles	Threshold %	M Miles	U Miles	M Miles	U Miles
Earthen Levee								
Vegetation	1.46		1.46	19.60%		0.01		
Trim / Thin Trees	0.02		0.02	0.27%				
Encroachments	0.03		0.03	0.40%	0.10			
			0.00	0.27%				
Animal Control	0.02		0.02	0.27 /6				
Animal Control Supplemental	0.02		0.02	0.27 /0				
	0.02		0.02	0.21 /6	0.06			
Supplemental	0.02		0.02	0.2776	0.06			

Winter **

Flood Control Project Maintenance Levee Inspections

LMA District Cover Sheet

Fall 2019 Levee Inspection Results

Reclamation District No. 2075 McMullin

Spring

Summer **

Fall

	(March - May)	(June - August)	(September - November)	(December - February)						
† Overall LMA Rating (Fall Only)			U							
	** Non-receipt of Summ Reports may effect or									
SPRING INSPECTIONS: Overall maintenance ratings are not determined for the spring inspection results. Individual maintenance deficiencies are rated using the same criteria in the spring and in the fall. FALL INSPECTIONS: The overall maintenance rating shown above is based on operation and maintenance deficiencies identified within the attached unit inspection reports. This rating is not intended to be an indiction of risk.										
Comments	пи пареслоп геропа.	This fathing is not inter-	Tided to be all indiction of	JI HJA.						

Unit Cover Sheet

Fall 2019 Levee Inspection Results

Reclamation District No. 2075 McMullin

Waterway	Bank	Unit Miles
Unit No. 01 San Joaquin River	Right	7.45

	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)			U	
Date of Inspection	5/15/2019 - 5/15/2019		11/21/2019 - 11/21/2019	
DWR Inspector	Alberto De Leon		Alberto De Leon	
Accompanied By	Loren Haworth		Ed Cardoza	
	Brian Mizuno			
	Ed Cardoza			

Summer & Winter Inspections

The Local Maintaining Agency (LMA) is responsible for summer and winter inspections. The LMA is required to submit a report regarding summer and winter inspections to the California Department of Water Resources (DWR).

DWR must be informed on the:

- a) completion of the inspection
- b) any changes other than the results of normal maintenance
- c) corrections to deficiencies noted in this report

If additional items are noted, further documentation of those items must also be submitted.

The LMA should submit this information to DWR using the LMA web application tool available at:

http://cdec.water.ca.gov/lma.html

If the LMA is unable to submit information on this webpage, please contact DWR for assistance.

The LMA should submit the information and any associated documentation by September 30 for summer inspections and March 31 for winter inspections.

Levee Inspection Report By Mile - Fall 2019

Reclamation District No. 2075 McMullin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	7.45	11/21/2019 11/21/2019	Alberto De Leon

LM Start		Rating **	Α	Issue No.		9		
LM End		Issue Type +	Ма	Location *		N/A		
Category Earthen Levee				GPS La	atitude	e/Longitude		
Category				Start		End		
Item		s & Maintenaı	nce		0	37.744860 °		
пеш	Manuals				0	-121.289828°		
DWR ID DWR_RD2075_01_f _ 2014_9								
		Comn	nent Cod	de				
		Inspecto	or Comm	nent				
RD 2075 h	RD 2075 has the O&M Manual on file.							

No Photos

LM Start		Rating **	Α	Issue No.		10	
LM End		Issue Type +	Ma	Location *			
Category	Earthen L	evee		GPS La	atitud	le/Longitude	
Calegory				Start		End	
Item		y Supplies &			٥		0
item	Equipmen	it			٥		0
DWR ID	DWR_RD2	075_01_f _ 201	4_10				
		Comn	nent Coo	de			
							Т

No Photos

Inspector Comment RD 2075 has emergency supplies stored in their building.

LM Start		Rating **	Α	Issue No.		11		
LM End		Issue Type +	Ма	Location *				
Category	Earthen L	evee		GPS La	atitu	de/Longitude		
Calegory				Start		End		
Item	Flood Pre		٥		0			
пеш					٥		0	
DWR ID	DWR_RD2	075_01_f _ 201	4_11					
		Comn	nent Cod	le				
		Inspecto	or Comm	ent				
RD 2075 h	RD 2075 has regular training for their work crews.							

No Photos

* Location

LS : Land Side WS: Water Side

N/A: Not Applicable

A : Acceptable
M : Minimally Acceptable
U : Unacceptable

N : Not Inspected/Rated C : Corrected

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence En: Enforcement

Levee Inspection Report By Mile - Fall 2019

Reclamation District No. 2075 McMullin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	7.45	11/21/2019 11/21/2019	Alberto De Leon

LM Start	0.04	Rating **	М	Issue No.		13		
LM End	0.11	Issue Type +	En	Location * LS				
Category	Earthen L	evee		GPS La	atitud	e/Longitude		
Calegory				Start		End		
Item	Encroach	ments		37.7492	41 °	37.748300°		
item				-121.2892	29°	-121.289736 °		
DWR ID DWR_RD2075_01_f _ 2019_13								
		Comn	nent Cod	de				
DT : Ditch								
		Inspecto	or Comm	nent				

Photo 1 of 1 : FA_2019_RD2075_315_13_20191121_00065.jpg

View of ditch along the landside easement. Fall 2019

LM Start	0.12	Rating **	М	Issue No.		49
LM End	0.12	Issue Type +	En	Location *		
Category	Suppleme	ental		GPS La	titud	le/Longitude
Calegory				Start		End
Item		WR UCIP Fie	ld	37.7482	00°	37.748200°
пеш	Study	udy		-121.2897	17°	-121.289717°
DWR ID	24735					

Inspector Comment

Comment Code

DS_ID:24735 FS_ID:24663 EP_NO: 4736

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: - pipe not visible on waterside.- no access to concrete riser on waterside.- blocked siphon breaker.

FIELD_STRUCT_DESC: 14-inch coated steel drainage discharge pipe through the levee, 4 feet below the crown. Two concrete cutoff walls. Pump mounted on a pile structure in the drainage ditch on the landside (LS). Siphon breaker in a concrete riser on the waterside (WS) slope. Concrete distribution box at the WS toe. (Plans for removing and replacing an existing drainage pipe through the levee authorized under Permit No. 4736, 1964 - Reclamation District No. 2075). [Additional Reference(s): DWR Levee Log, 2005, 12-inch pipe referenced. USACE San Joaquin O&M Manual 3, December 1968, (HLM 0.12), 12-inch pipe referenced].

FS Date: 11/13/2013

Photo 1 of 3: UCIP_FA_2019_24663_44022.jpg



WS view: concrete standpipe (top) and concrete pipe riser (bottom) on levee slope.

Levee Inspection Report By Mile - Fall 2019

Reclamation District No. 2075 McMullin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	7.45	11/21/2019 11/21/2019	Alberto De Leon

LM Start	0.12	Rating **	М	Issue No.		49 (cont)
LM End	0.12	Issue Type +	En	Location *		
Category	Suppleme	ental		GPS La	titud	e/Longitude
Calegory				Start		End
Item	DRAFT D	WR UCIP Fie	ld	37.7482	00°	37.748200 °
пеш	Study			-121.2897	17°	-121.289717°
DWR ID	24735					·

Comment Code

Inspector Comment

DS_ID:24735 FS_ID:24663 EP_NO: 4736

Repair Type: Non-Urgent Crossing Status: Found

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concrete riser on waterside.- blocked siphon breaker.

FIELD_STRUCT_DESC: 14-inch coated steel drainage discharge pipe through the levee, 4 feet below the crown. Two concrete cutoff walls. Pump mounted on a pile structure in the drainage ditch on the landside (LS). Siphon breaker in a concrete riser on the waterside (WS) slope. Concrete distribution box at the WS toe. (Plans for removing and replacing an existing drainage pipe through the levee authorized under Permit No. 4736, 1964 - Reclamation District No. 2075). [Additional Reference(s): DWR Levee Log, 2005, 12-inch pipe referenced. USACE San Joaquin O&M Manual 3, December 1968, (HLM 0.12), 12-inch pipe referenced].

FS Date: 11/13/2013

LM Start	0.12	Rating **	М	Issue No.	49 (cont)
LM End	0.12	Issue Type +	En	Location *	

Photo 2 of 3: UCIP_FA_2019_24663_44021.jpg



WS view: concrete pipe riser with siphon breaker on levee slope.

Photo 3 of 3: UCIP_FA_2019_24663_44020.jpg



LS view: walkway, pump, service pole, and intake structure.

Levee Inspection Report By Mile - Fall 2019

Reclamation District No. 2075 McMullin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	7.45	11/21/2019 11/21/2019	Alberto De Leon

LM Start	0.12	Rating **	М	Issue No.		24	
LM End	0.12	Issue Type +	Ma	Location *		WS	
Category Earthen Levee			GPS La	atitud	e/Longitude		
Calegory				Start		End	
Item	Encroachments			37.7481	75 °	37.748175°	
пеш				-121.2897	-121.289717°		
DWR ID DWR_RD2075_01_s _ 2019_24							
		Comn	nent Cod	de			
PR : Pruni	ngs						
		Inspecto	or Comm	nent			

No Photos

Issue No. Rating ** 0.12 М LM Start 17 0.24 Issue Type + Location * LS LM End Earthen Levee GPS Latitude/Longitude Category Start End Vegetation 37.748129° 37.746502° Item -121.289667° -121.289467 ° DWR_RD2075_01_f _ 2019_17 DWR ID Comment Code

V2: Remove the wild growth other than native grasses from the levee slopes.

Inspector Comment

Rating ** Issue No. LM Start 0.16 35 Location * 0.16 Issue Type + Ma LS LM End GPS Latitude/Longitude Earthen Levee Category Start End Trim / Thin Trees 37.747638° 37.747638° Item -121.289452 ° -121.289452° DWR ID DWR_RD2075_01_f _ 2019_35 Comment Code

T1: Trim trees to at least five feet above ground level.

Inspector Comment

No Photos

No Photos

* Location

LS: Land Side

WS: Water Side

N/A: Not Applicable

A : Acceptable M : Minimally Acceptable U : Unacceptable

N : Not Inspected/Rated

C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence

En: Enforcement

Levee Inspection Report By Mile - Fall 2019

Reclamation District No. 2075 McMullin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	7.45	11/21/2019 11/21/2019	Alberto De Leon

LM Start	0.73	Rating **	U	Issue No.		25	
LM End	0.73	Issue Type +	En	Location *		WS	
Category Earthen Levee				GPS La	atitud	e/Longitude	
Category			Start		End		
Item	Vegetation			37.7421	13°	37.742113°	
item	item				81 °	-121.284981 °	
DWR ID	DWR_RD2	075_01_s _ 201	9_25				
		Comn	nent Cod	de			
V6 : Lands	caping						
		Inspecto	or Comm	nent			
A residential home has an untrimmed landscape bush on the waterside slope.							



View of landscape bush on waterside slope in front of residential home. (Spring 2019)

LM Start	0.98	Rating **	М	Issue No.		30	
LM End	0.98	Issue Type +	En	Location *		LS	
Category Earthen Levee				GPS La	atitud	le/Longitude	
Category				Start		End	
Encroachments ltem				37.7401	39°	37.740139°	
item				-121.281304° -121.2813			
DWR ID DWR_RD2075_01_s _ 2019_30							
		Comn	nent Cod	de			
PR : Pruni	ngs						
			_				
		Inspecto	or Comm	nent			



View of prunings on landside slope. Fall 2019

LM Start	1.15	Rating **	M	Issue No.		36		
LM End	1.15	Issue Type +	Ма	Location *	LS			
Category	Category Earthen Levee				GPS Latitude/Longitude			
Category				Start		End		
Item	ments	37.7378	44°	37.737844	0			
пеш				-121.281650 ° -121.2			0	
DWR ID DWR_RD2075_01_f _ 2019_36								
		Comn	nent Cod	de				
PR : Pruni	ngs							
		Inspecto	or Comm	nent				

No Photos

Levee Inspection Report By Mile - Fall 2019

Reclamation District No. 2075 McMullin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	7.45	11/21/2019 11/21/2019	Alberto De Leon

LM Start	1.18	Rating **	М	Issue No.		37	
LM End	1.18	Issue Type +	Ma	Location *	LS		
Category	Category Earthen Levee				atitud	e/Longitude	
Calegory						End	
Encroachments Item				37.7374	03°	37.737403°	
item		-121.281542 °		-121.281542	0		
DWR ID	DWR_RD2	075_01_f _ 201	9_37				
		Comn	nent Cod	de			
PR : Pruni	ngs						
	Inspector Comment						

No Photos

1.25	Rating **	M	Issue No.		38	
1.25	Issue Type +	Ма	Location *		LS	
Category Earthen Levee			GPS Latitude/Longitude			
			Start		End	
Animal Co	ontrol		37.7363	34°	37.736384	٥
				29°	-121.281529	°
DWR_RD2	RD2075_01_f _ 2019_38					
	1.25 Earthen L Animal Co	1.25 Issue Type + Earthen Levee Animal Control	1.25 Issue Type + Ma Earthen Levee	1.25 Issue Type + Ma Location * Earthen Levee GPS La Start Start Animal Control 37.73636 -121.28152	1.25 Issue Type + Ma Location * Earthen Levee GPS Latitud Start 37.736384 ° -121.281529 °	1.25 Issue Type + Ma Location * LS Earthen Levee GPS Latitude/Longitude Start End Animal Control 37.736384 ° 37.736384 -121.281529 ° -121.281529

Comment Code

A3: No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

Inspector Comment

No Photos

LM Start	1.43	Rating **	М	Issue No.		29
LM End	1.63	Issue Type +	Ma	Location *		LS
Category	Earthen L	evee		GPS La	atitud	e/Longitude
Calegory						End
Item	Vegetatio	n		37.7350	61°	37.734213°
item			-121.2842	69°	-121.287660°	
DWR ID	DWR RD2	075 01 s 201	8 29			

Comment Code

V2: Remove the wild growth other than native grasses from the levee slopes.

Inspector Comment

Wild growth at the landward toe is blocking the view and should be cleared to fifteen feet from the landward toe.

Photo 1 of 2: FA_2019_RD2075_315_29_20191121_00067.jpg



View of vegetation on landside slope. Fall 2019

* Location

LS: Land Side WS: Water Side

N/A: Not Applicable

A : Acceptable M : Minimally Acceptable U : Unacceptable

N : Not Inspected/Rated

C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence

En: Enforcement

Levee Inspection Report By Mile - Fall 2019

Reclamation District No. 2075 McMullin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	7.45	11/21/2019 11/21/2019	Alberto De Leon

LM Start	1.43	М	Issue No.	ssue No. 29 (con			
LM End	1.63	Issue Type +	Ма	Location *	LS		
Category	evee	GPS La	tituc	le/Longitude			
Calegory	alegory					End	
Item	Vegetatio	n		37.73506	î1°	37.734213°	
пеш				-121.28426	9°	-121.287660 °	
DWR ID DWR_RD2075_01_s _ 2018_29							
Comment Code							

 $\ensuremath{\mathsf{V2}}$: Remove the wild growth other than native grasses from the levee slopes.

Inspector Comment

Wild growth at the landward toe is blocking the view and should be cleared to fifteen feet from the landward toe.

Photo 2 of 2 : FA_2019_RD2075_315_29_20190830_00042.jpg



Looking west at dense veg. at landward toe. (Spring 2018)

LM Start	1.58	Rating **	С	Issue No.		12
LM End	1.67	Issue Type + Ma		Location *		WS
Category	Supplemental					le/Longitude
Calegory	Category					End
Item	2017 Stor	m Damage		37.7343	53°	37.734463°
пеш				-121.28672	20°	-121.288258°
DWR ID	LMA-481					

Comment Code

Inspector Comment

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:575

Site Designation:LMA-481 Repair Type: Erosion Rating:Area of Concern

Field Date:8/10/2017

Notes: 10/23/17: According to LMA and my observations at LM 1.63, this site never had riprap (contrary to previous comments). Erosion has encroached into levee prism. Future high water and wavewash will likely advance erosion further into prism. Repairs should be made prior to next high water.

No Photos

Levee Inspection Report By Mile - Fall 2019

Reclamation District No. 2075 McMullin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	7.45	11/21/2019 11/21/2019	Alberto De Leon

LM Start	1.89	89 Rating ** C		Issue No.		31	
LM End	2.28	Issue Type +	Ма	Location *	LS		
Earthen Levee				GPS La	atitud	e/Longitude	
Calegory	Category				Start En		
Item	Vegetatio	n		37.7360	52°	37.731919	0
пеш				-121.2912	55 °	-121.293768	0
DWR ID DWR_RD2075_01_s _ 2019_31							
Comment Code							

V2 : Remove the wild growth other than native grasses from the levee slopes.

Inspector Comment

Tumble weeds are on the landside toe. RD will burn the weeds in late spring.

No Photos

LM Start	2.32	Rating **	М	Issue No.		50
LM End	2.32	Issue Type +	Ma	Location *		
Category	Suppleme	GPS La	atitud	e/Longitude		
Category				Start End		End
Item		DRAFT DWR UCIP LMA				37.731314°
item	Responsil	oility		-121.2937	13°	-121.293713°
DWR ID	24737					

Inspector Comment

Comment Code

DS_ID:24737 FS_ID:24666 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: - service pole on landside.- looks abandoned.

Walkway in dilapidated condition.

FIELD_STRUCT_DESC: 16-inch steel drainage discharge pipe through the levee, 4.5 feet below the crown. Corrugated metal cutoff wall. Pump mounted on a pile structure in a drainage ditch on the landside (LS). Siphon breaker in a corrugated metal pipe (CMP) riser on the waterside (WS) slope. [Additional Reference(s): DWR Levee Log, 2005. USACE San Joaquin O&M Manual 3, December 1968, (HLM 2.30)].

FS Date: 11/13/2013



WS view: concrete standpipe (top) and steel pipe riser (bottom marked) on levee slope.

Levee Inspection Report By Mile - Fall 2019

Reclamation District No. 2075 McMullin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	7.45	11/21/2019 11/21/2019	Alberto De Leon

LM Start	2.32	Rating **	Issue No.	50 (cont)			
LM End	2.32	Issue Type +	Ma	Location *			
Category	GPS Latitude/Longitude						
Calegory	Category					End	
Item		WR UCIP LM	A	37.7313 ⁻	14°	37.731314°	
пеш	Responsibility				13°	-121.293713°	
DWR ID	DWR ID 24737						
	Comment Code						

Inspector Comment

DS_ID:24737 FS_ID:24666 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: - service pole on landside.- looks abandoned.

Walkway in dilapidated condition.

FIELD_STRUCT_DESC: 16-inch steel drainage discharge pipe through the levee, 4.5 feet below the crown. Corrugated metal cutoff wall. Pump mounted on a pile structure in a drainage ditch on the landside (LS). Siphon breaker in a corrugated metal pipe (CMP) riser on the waterside (WS) slope. [Additional Reference(s): DWR Levee Log, 2005. USACE San Joaquin O&M Manual 3, December 1968, (HLM 2.30)].

FS Date: 11/13/2013

LM Start	2.32	Rating **	М	Issue No.	50 (cont)
LM End	2.32	Issue Type +	Ma	Location *	



WS view: blocked siphon breaker in steel pipe riser on levee slope.

Photo 3 of 3: UCIP_FA_2019_24666_44029.jpg



WS view: concrete standpipe on levee toe.

Levee Inspection Report By Mile - Fall 2019

Reclamation District No. 2075 McMullin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	7.45	11/21/2019 11/21/2019	Alberto De Leon

LM Start	2.32	Rating **	A/W	Issue No.		15	
LM End	2.78	Issue Type +	Location *		LS		
Category	ental	GPS Latitude/Longitude					
Calegory	Category					End	
Item	2017 Storm Damage				00°	37.724900°	
пеш		-121.29340	00°	-121.293800°			
DWR ID	LMA-306						

Inspector Comment

Comment Code

Levee Evaluation Comments

Description:Sinkholes have formed along the landside levee toe as a result of the high water. The cause of the sinkholes is not clear, but a similar phenomenon in this area is believed to have caused the levee breach earlier this year. Further geotechnical investigation is needed. Site ID No:479

Site Designation:LMA-306 Repair Type: Stability

Rating:Area of Concern Field Date:7/26/2017

Notes: Sink holes appear to have already been filled. 10/23/17: LMA has removed pipes (parallel to levee) in this area, and drainage ditch has been relocated to approx 60 feet away from levee toe. Known sandy soils in region may contribute to sinkholes.

LM Start	2.32	Rating **	A/W	Issue No.	15 (cont)
LM End	2.78	Issue Type +	Ma	Location *	LS



Photo 2 of 3: LEVAL_FA_2019_479_2215.jpg



Levee Inspection Report By Mile - Fall 2019

Reclamation District No. 2075 McMullin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	7.45	11/21/2019 11/21/2019	Alberto De Leon

LM Start	2.32	Rating **	A/W	Issue No.		15 (cont)
LM End	2.78	Issue Type + Ma		Location *		LS
Category	ental	GPS La	titud	e/Longitude		
Calegory	Category					End
Item	2017 Storm Damage				00°	37.724900°
пеш				-121.2934	00°	-121.293800 °
DWR ID	LMA-306					

Inspector Comment

Comment Code

Levee Evaluation Comments

Description: Sinkholes have formed along the landside levee toe as a result of the high water. The cause of the sinkholes is not clear, but a similar phenomenon in this area is believed to have caused the levee breach earlier this year. Further geotechnical investigation is needed. Site ID No:479

Site Designation:LMA-306 Repair Type: Stability Rating: Area of Concern

Field Date:7/26/2017

Notes: Sink holes appear to have already been filled. 10/23/17: LMA has removed pipes (parallel to levee) in this area, and drainage ditch has been relocated to approx 60 feet away from levee toe. Known sandy soils in region may contribute to sinkholes.

Photo 3 of 3: FA_2019_RD2075_315_15_20190830_00016.jpg



10/23/17: LMA has removed pipes (parallel to levee) in this area, and drainage ditch has been relocated to approx 60 feet away from levee toe. Known sandy soils in region may contribute to sinkholes.

LM Start	2.74	Rating **	A/W	Issue No.		16		
LM End	2.84	Issue Type +	Ма	Location *		Location *		WS
Category	Suppleme	ental		GPS La	atitud	e/Longitude		
Calegory		Start		End				
Item	2017 Stor	m Damage	37.7252	00°	37.724000°			
item				-121.2944	00°	-121.293200°		
DWR ID	LMA-307					·		

Comment Code

Inspector Comment

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion. Based upon levee inspections, it was determined the waterside levee slopes were eroding, deteriorating and degrading in concave pocket sections at various locations along this levee reach. The eroded levee sections need to be restored back to design standards to prevent further deterioration of the damaged levee

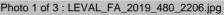
Site ID No:480

sections.

Site Designation:LMA-307 Repair Type: Erosion Rating: Area of Concern Field Date:7/26/2017

Notes: Low priority because of the wide berm. Could not see all of the bank because of vegetation. Rock was placed on LS here during this

years (2017) storms.





Levee Inspection Report By Mile - Fall 2019

Reclamation District No. 2075 McMullin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	7.45	11/21/2019 11/21/2019	Alberto De Leon

LM Start	2.74	Rating **	A/W	Issue No.		16 (cont)
LM End	2.84	Issue Type +	Ма	Location *		WS
Category	ental	GPS Latitude/Longitude				
Calegory	Category					End
Item	2017 Storm Damage				00°	37.724000°
пеш		-121.2944	00°	-121.293200°		
DWR ID	LMA-307					·

Inspector Comment

Comment Code

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion. Based upon levee inspections, it was determined the waterside levee slopes were eroding, deteriorating and degrading in concave pocket sections at various locations along this levee reach. The eroded levee sections need to be restored back to design standards to prevent further deterioration of the damaged levee sections.

Site ID No:480

Site Designation:LMA-307 Repair Type: Erosion Rating:Area of Concern Field Date:7/26/2017

Notes: Low priority because of the wide berm. Could not see all of the bank because of vegetation. Rock was placed on LS here during this years (2017) storms.

LM Start	2.74	Rating **	A/W	Issue No.	16 (cont)
LM End	2.84	Issue Type +	Ma	Location *	WS



Photo 3 of 3: LEVAL_FA_2019_480_2209.jpg



* Location

LS : Land Side N/A : Not Applicable WS : Water Side

WS : Water Side CR : Crown * Rating

A : Acceptable
M : Minimally Acceptable
U : Unacceptable

N : Not Inspected/Rated C : Corrected

on O. Marintain

+ Issue Type

Ma : Maintenance Deficiency

Ob : Design & System Obsolescence En : Enforcement

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Levee Inspection Report By Mile - Fall 2019

Reclamation District No. 2075 McMullin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	7.45	11/21/2019 11/21/2019	Alberto De Leon

LM Start	2.77	Rating **	A/W	Issue No.		14
LM End	2.83	Issue Type +	Ма	Location *		WS
Category	ental	GPS La	titud	e/Longitude		
Calegory	Category					End
Item	2017 Storm Damage				10°	37.724207°
пеш		-121.2941	50°	-121.293308°		
DWR ID	LMA-35					

Inspector Comment

Comment Code

Levee Evaluation Comments

Description: Site ID No:81

Site Designation:LMA-35 Repair Type: Erosion Rating:Area of Concern Field Date:6/8/2017

Notes: no damage present 10/23/17: Photos taken of vertical eroded low-flow bank approximately 20 feet from waterside levee toe. Area is composed of loose sand. Sandbar in channel may direct current toward this area.

LM Start	2.77	Rating **	A/W	Issue No.	14 (cont)
LM End	2.83	Issue Type +	Ma	Location *	WS



Photo 2 of 6: LEVAL_FA_2019_81_1341.jpg



Levee Inspection Report By Mile - Fall 2019

Reclamation District No. 2075 McMullin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	7.45	11/21/2019 11/21/2019	Alberto De Leon

LM Start	2.77	Rating **	A/W	Issue No.		14 (cont)			
LM End	2.83	Issue Type +	Ма	Location *		WS			
Category	Suppleme	GPS Latitude/Longitude							
Calegory	Category					End			
Item	2017 Storm Damage			37.7248	10°	37.724207°			
пеш				-121.2941	50°	-121.293308°			
DWR ID	DWR ID LMA-35								
Comment Code									

Inspector Comment

Levee Evaluation Comments

Description: Site ID No:81

Site Designation:LMA-35 Repair Type: Erosion Rating:Area of Concern Field Date:6/8/2017

Notes: no damage present 10/23/17: Photos taken of vertical eroded low-flow bank approximately 20 feet from waterside levee toe. Area is composed of loose sand. Sandbar in channel may direct current toward this area.

LM Start	2.77	Rating **	A/W	Issue No.	14 (cont)
LM End	2.83	Issue Type +	Ma	Location *	WS



Photo 4 of 6: FA_2019_RD2075_315_14_20190830_00011.jpg



View down through erosion rut in bank. 10/23/17: Photos taken of vertical eroded low-flow bank approximately 20 feet from waterside levee toe. Area is composed of loose sand. Sandbar in channel may direct current toward this area.

Levee Inspection Report By Mile - Fall 2019

Reclamation District No. 2075 McMullin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	7.45	11/21/2019 11/21/2019	Alberto De Leon

LM Start	2.77	Rating **	A/W	Issue No.		14 (cont)
LM End	2.83	Issue Type + Ma		Location *		WS
Category	Suppleme	GPS La	titud	e/Longitude		
Calegory	Category					End
Item	2017 Storm Damage			37.7248	10°	37.724207°
пеш				-121.2941	50°	-121.293308°
DWR ID	LMA-35					

Inspector Comment

Comment Code

Levee Evaluation Comments

Description: Site ID No:81

Site Designation:LMA-35 Repair Type: Erosion Rating:Area of Concern Field Date:6/8/2017

Notes: no damage present 10/23/17: Photos taken of vertical eroded low-flow bank approximately 20 feet from waterside levee toe. Area is composed of loose sand. Sandbar in channel may direct current toward this area.

LM Start	2.77	Rating **	A/W	Issue No.	14 (cont)
LM End	2.83	Issue Type +	Ma	Location *	WS

Photo 5 of 6 : FA_2019_RD2075_315_14_20190830_00012.jpg



View upstream showing narrow distance between levee toe and vertical bank. 10/23/17: Photos taken of vertical eroded low-flow bank approximately 20 feet from waterside levee toe. Area is composed of loose sand. Sandbar in channel may direct current toward this area.

Photo 6 of 6: FA_2019_RD2075_315_14_20190830_00013.jpg



View upstream showing narrow distance between levee toe and vertical bank. 10/23/17: Photos taken of vertical eroded low-flow bank approximately 20 feet from waterside levee toe. Area is composed of loose sand. Sandbar in channel may direct current toward this area.

Levee Inspection Report By Mile - Fall 2019

Reclamation District No. 2075 McMullin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	7.45	11/21/2019 11/21/2019	Alberto De Leon

LM Start	3.43	Rating **	С	Issue No.	32		
LM End	3.43	Issue Type +	Ма	Location *		LS	
Category	evee	GPS La	atitud	e/Longitude			
Calegory				Start		End	
Itom	Animal Co	ontrol		37.7174	77°	37.717477°	
пеш	ltem -121.286716° -121.286716						
DWR ID DWR_RD2075_01_s _ 2019_32							
Comment Code							

A3: No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

Inspector Comment

No Photos

LM Start	3.86	Rating **	М	Issue No.		51
LM End	3.86	Issue Type +	En	Location *		
Category	Suppleme	ental		GPS La	titud	e/Longitude
Category				Start		End
Item		WR UCIP Fie	ld	37.71374	14°	37.713744°
item	Study			-121.2807	ı2°	-121.280712 °
DWR ID	24746					

Comment Code

Inspector Comment

DS_ID:24746 FS_ID:41721 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Several concrete structure with Alfalfa valve. Only steel pipe visible on river bank. Service pole on waterside. New field

discovered crossing

FIELD_STRUCT_DESC: 10-inch polyvinyl chloride (PVC) irrigation discharge pipe through the levee, at an unknown depth. Slant pump on the riverbank. Distribution box on the waterside (WS) berm. Concrete Ushaped headwall and open outlet on the landside (LS) toe. Crossing was field discovered. (Plans to install a slant pump on the riverbank authorized under Permit No. 5484, 1966 - Jack Clinton).

FS Date: 11/13/2013



WS view: slant pump and concrete distribution box on levee berm.

: Acceptable Minimally Acceptable U : Unacceptable

N : Not Inspected/Rated C : Corrected

+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En: Enforcement

Levee Inspection Report By Mile - Fall 2019

Reclamation District No. 2075 McMullin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	7.45	11/21/2019 11/21/2019	Alberto De Leon

LM Start	3.86	Rating **	М	Issue No.	sue No. 51 (cont)		
LM End	3.86	Issue Type +	En	Location *			
Category	ental	GPS La	atitud	e/Longitude			
Calegory			Start		End		
Item	DRAFT D	WR UCIP Fie	ld	37.7137	'44 °	37.713744°	
item	Study		-121.2807	12°	-121.280712°		
DWR ID 24746							
Comment Code							

Inspector Comment

DS_ID:24746 FS_ID:41721 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Several concrete structure with Alfalfa valve. Only steel pipe visible on river bank. Service pole on waterside.New field

discovered crossing.

FIELD_STRUCT_DESC: 10-inch polyvinyl chloride (PVC) irrigation discharge pipe through the levee, at an unknown depth. Slant pump on the riverbank. Distribution box on the waterside (WS) berm. Concrete U-shaped headwall and open outlet on the landside (LS) toe. Crossing was field discovered. (Plans to install a slant pump on the riverbank authorized under Permit No. 5484, 1966 - Jack Clinton).

FS Date: 11/13/2013

LM Start	3.86	Rating **	М	Issue No.	51 (cont)
LM End	3.86	Issue Type +	En	Location *	



WS view: slant pump on timber pile in the stream.

Photo 3 of 3: UCIP_FA_2019_41721_45980.jpg



LS view: concrete U type headwall on levee toe and open PVC pipe.

Levee Inspection Report By Mile - Fall 2019

Reclamation District No. 2075 McMullin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	7.45	11/21/2019 11/21/2019	Alberto De Leon

LM Start	3.90	Rating **	A/W	Issue No.		18		
LM End	3.95	Issue Type +	Ма	Location *		WS		
Category	Suppleme	GPS La	atitud	e/Longitude				
Calegory		Start		End				
Item	2017 Storm Damage			37.7133	88 °	37.713492	0	
пеш				-121.2800	18°	-121.278982	0	
DWR ID	LMA-482							

Comment Code

Inspector Comment

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:576

Site Designation:LMA-482 Repair Type: Erosion Rating:Area of Concern Field Date:8/10/2017

Notes: 10/23/17: There was no riprap in this area. Erosion sites have

been repaired by LMA.

LM Start	3.90	Rating **	A/W	Issue No.	18 (cont)
LM End	3.95	Issue Type +	Ma	Location *	WS

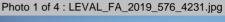




Photo 2 of 4: LEVAL_FA_2019_576_4236.jpg



Levee Inspection Report By Mile - Fall 2019

Reclamation District No. 2075 McMullin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	7.45	11/21/2019 11/21/2019	Alberto De Leon

LM Start	3.90	Rating **	A/W	Issue No.		Issue No.		Issue No.		18 (cont)
LM End	3.95	Issue Type +	Ма	Location *		WS				
Category				GPS Latitude/Longitude						
Calegory			Start		End					
Item	2017 Stor	m Damage		37.7133	88°	37.713492°				
item				-121.2800	18°	-121.278982°				
DWR ID	LMA-482									

Inspector Comment

Comment Code

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:576

Site Designation:LMA-482 Repair Type: Erosion Rating:Area of Concern Field Date:8/10/2017

Notes: 10/23/17: There was no riprap in this area. Erosion sites have been repaired by LMA.

 LM Start
 3.90
 Rating **
 A/W
 Issue No.
 18 (cont)

 LM End
 3.95
 Issue Type +
 Ma
 Location *
 WS



Photo 4 of 4: FA_2019_RD2075_315_18_20190830_00023.jpg



10/23/17: There was no riprap in this area (contrary to previous comment). Erosion sites have been repaired by LMA.

Levee Inspection Report By Mile - Fall 2019

Reclamation District No. 2075 McMullin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	7.45	11/21/2019 11/21/2019	Alberto De Leon

LM Start	4.00	Rating **	A/W	Issue No.		19	
LM End	4.04	Issue Type +	Ма	Location *	WS		
Category				ental GPS Latitude/Lo			
Calegory				Start		End	
Item	2017 Stor	m Damage		37.71404	48 °	37.714630°	
пеш				-121.27836	33°	-121.278263 °	
DWR ID	LMA-483						

Comment Code

Inspector Comment

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:577

Site Designation:LMA-483 Repair Type: Erosion Rating:Area of Concern Field Date:8/10/2017

Notes:

LM Start	4.00	Rating **	A/W	Issue No.	19 (cont)
LM End	4.04	Issue Type +	Ма	Location *	WS



Photo 2 of 3: LEVAL_FA_2019_577_4473.jpg



Levee Inspection Report By Mile - Fall 2019

Reclamation District No. 2075 McMullin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	7.45	11/21/2019 11/21/2019	Alberto De Leon

LM Start	4.00	Rating **	A/W	Issue No.		Issue No.		19 (cont)
LM End	4.04	Issue Type +	sue Type + Ma			WS		
Category	ental	GPS Latitude/Longitude						
Calegory				Start		End		
Item	2017 Stor	m Damage		37.7140	48 °	37.714630 °		
item			-121.2783	63 °	-121.278263 °			
DWR ID	LMA-483					·		

Comment Code

Inspector Comment

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:577

Site Designation:LMA-483 Repair Type: Erosion Rating:Area of Concern Field Date:8/10/2017

Notes:



LM Start	4.95	Rating **	A/W	Issue No.		20			
LM End	5.20	Issue Type +	Ob	Location *		LS			
Category	Suppleme	ental	GPS Latitude/Longitude						
Calegory			Start		End				
Item	2017 Stor		37.7272	00°	37.728900°				
itein				-121.2778	00°	-121.275200°			
DWR ID	LMA-308	MA-308							
Comment Code									

Inspector Comment

Levee Evaluation Comments

Description: Heavy seepage was observed during the high water this

year 2017. Site ID No:481

Site Designation:LMA-308 Repair Type: Seepage Rating:Area of Concern Field Date:7/26/2017

Notes: No evidence of flood fight here, but the orchard trees next to the levee are looking a little yellow compared to the others.



LS : Land Side N/A : Not Applicable WS : Water Side

CR : Crown

Monday, December 23, 2019 13:59

A : Acceptable
M : Minimally Acceptable
U : Unacceptable

N : Not Inspected/Rated

C : Corrected

+ Issue Type

Ma : Maintenance Deficiency Ob : Design & System Obsolescence

Levee Inspection Report By Mile - Fall 2019

Reclamation District No. 2075 McMullin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	7.45	11/21/2019 11/21/2019	Alberto De Leon

LM Start	4.95	Rating **	A/W	Issue No.		20 (cont)
LM End	5.20	Issue Type +	Ob	Location *		LS
Category				GPS La	e/Longitude	
Calegory		Start		End		
Item	2017 Stor	m Damage		37.7272	00°	37.728900 °
пеш			-121.2778	00°	-121.275200 °	
DWR ID	LMA-308					·

Inspector Comment

Comment Code

Levee Evaluation Comments

Description:Heavy seepage was observed during the high water this year 2017.

Site ID No:481

Site Designation:LMA-308 Repair Type: Seepage Rating:Area of Concern Field Date:7/26/2017

Notes: No evidence of flood fight here, but the orchard trees next to the levee are looking a little yellow compared to the others.

LM Start	4.95	Rating **	A/W	Issue No.	20 (cont)
LM End	5.20	Issue Type +	Ob	Location *	LS



Photo 3 of 3: LEVAL_FA_2019_481_2200.jpg



N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

Levee Inspection Report By Mile - Fall 2019

Reclamation District No. 2075 McMullin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	7.45	11/21/2019 11/21/2019	Alberto De Leon

LM Start	5.20	Rating **	М	Issue No.		52
LM End	5.20	Issue Type +	En	Location *		
Category	Suppleme	ental		GPS La	e/Longitude	
Calegory				Start		End
ltom	DRAFT D	WR UCIP Fie	ld	37.72885	3°	37.728853°
пеш	Item Study			-121.27522	0°	-121.275220°
DWR ID	24739					·

Inspector Comment

Comment Code

DS_ID:24739 FS_ID:50209 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: - flap gates in concrete box on LS toe have failed and are open. Rusted through flapgate may indicate condition of interior of

pipe.

FIELD_STRUCT_DESC: 1 of 2: 16-inch steel irrigation discharge pipe through the levee, 8 feet below the crown. Electrical conduit through the levee. Pump mounted on a pile structure in the river. Wooden walkway to the pump. Siphon breaker and concrete distribution box on the landside (LS) slope. [Additional Reference(s): DWR Levee Log, 2005, 18-inch pipe referenced. USACE San Joaquin O&M Manual 3, December 1968, (HLM 5.16), 18-inch pipe referenced].

FS Date: 6/21/2016

LM Start	5.20	Rating **	М	Issue No.	52 (cont)
LM End	5.20	Issue Type +	En	Location *	



WS view: two pipes, walkway to pump and pile structure in the stream.

Photo 2 of 3: UCIP_FA_2019_50209_45602.jpg



LS view: siphon breakers in concrete pipe risers (bottom) on levee slope. Concrete distribution box on levee toe (top).

Levee Inspection Report By Mile - Fall 2019

Reclamation District No. 2075 McMullin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	7.45	11/21/2019 11/21/2019	Alberto De Leon

LM Start	5.20	Rating **	М	Issue No.		52 (cont)
LM End	5.20	Issue Type +	En	Location *		
Category	Suppleme	ental		GPS Latitude/Longitud		
Calegory				Start		End
Item		DRAFT DWR UCIP Field			53°	37.728853°
пеш	Study			-121.2752	20°	-121.275220°
DWR ID	24739					·

Inspector Comment

Comment Code

DS_ID:24739 FS_ID:50209 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: - flap gates in concrete box on LS toe have failed and are open. Rusted through flapgate may indicate condition of interior of

pipe.

FIELD_STRUCT_DESC: 1 of 2: 16-inch steel irrigation discharge pipe through the levee, 8 feet below the crown. Electrical conduit through the levee. Pump mounted on a pile structure in the river. Wooden walkway to the pump. Siphon breaker and concrete distribution box on the landside (LS) slope. [Additional Reference(s): DWR Levee Log, 2005, 18-inch pipe referenced. USACE San Joaquin O&M Manual 3, December 1968, (HLM 5.16), 18-inch pipe referenced].

FS Date: 6/21/2016



LS view: siphon breaker in concrete pipe riser on levee slope.

LM Start	5.20	Rating **	М	Issue No.		53
LM End	5.20	Issue Type +	En	Location *		
Category	Suppleme	ental		GPS Latitude/Longitude		
Category				Start		End
Item		WR UCIP Fie	ld	37.72884	8°	37.728848 °
пеш	Study			-121.27519	5 °	-121.275195°
DWR ID	24743				·	

Inspector Comment

Comment Code

DS_ID:24743 FS_ID:25184 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Flap gate lid displaced.

FIELD_STRUCT_DESC: 2 of 2: 16-inch steel irrigation discharge pipe through the levee, 8 feet below the crown. Electrical conduit through the levee. Pump mounted on a pile structure in the river. Wooden walkway to the pump. Siphon breaker and concrete distribution box on the landside (LS) slope. [Additional Reference(s): DWR Levee Log, 2005, 18-inch pipe referenced. USACE San Joaquin O&M Manual 3,

December 1968, (HLM 5.16), 18-inch pipe referenced].

FS Date: 11/13/2013



WS view: two pipes, walkway to pump and pile structure in the stream.

* Location	** Rating		+ Issue Type
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Fall 2019

Reclamation District No. 2075 McMullin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	7.45	11/21/2019 11/21/2019	Alberto De Leon

LM Start	5.20	Rating **	М	Issue No.		53 (cont)
LM End	5.20	Issue Type +	En	Location *		
Category	Suppleme	ental		GPS Latitude/Longitude		
Calegory				Start		End
Item		WR UCIP Fie	ld	37.72884	8°	37.728848°
пеш	Study			-121.27519	5 °	-121.275195°
DWR ID	24743					·

Inspector Comment

Comment Code

DS_ID:24743 FS_ID:25184 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Flap gate lid displaced.

FIELD_STRUCT_DESC: 2 of 2: 16-inch steel irrigation discharge pipe through the levee, 8 feet below the crown. Electrical conduit through the levee. Pump mounted on a pile structure in the river. Wooden walkway to the pump. Siphon breaker and concrete distribution box on the landside (LS) slope. [Additional Reference(s): DWR Levee Log, 2005, 18-inch pipe referenced. USACE San Joaquin O&M Manual 3, December 1968, (HLM 5.16), 18-inch pipe referenced].

FS Date: 11/13/2013

LM Start	5.20	Rating **	М	Issue No.	53 (cont)
LM End	5.20	Issue Type +	En	Location *	



WS view: closer view of two pumps and platform in the stream.

Photo 3 of 3: UCIP_FA_2019_25184_45606.jpg



LS view: siphon breakers in concrete pipe risers (bottom) on levee slope. Concrete distribution box on levee toe (top).

Levee Inspection Report By Mile - Fall 2019

Reclamation District No. 2075 McMullin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	7.45	11/21/2019 11/21/2019	Alberto De Leon

LM Start	5.21	Rating **	М	Issue No.	39		
LM End	5.46	Issue Type +	Ма	Location *	LS		
Category	Earthen L	evee		GPS Latitude/Longitude			
Calegory				Start E		End	
Item	Vegetatio	n		37.72872	27°	37.726179	
пеш				-121.27498	33°	-121.272004	
DWR ID	DWR ID DWR_RD2075_01_f _ 2019_39						
	Comment Code						

V2: Remove the wild growth other than native grasses from the levee slopes.

Inspector Comment

No Photos

LM Start	5.24	Rating **	A/W	Issue No.		21
LM End	5.29	Issue Type +	Ma	Location *		WS
Category Supplemental				GPS Latitude/Longitude		
Calegory			Start			End
Item	2017 Stor	m Damage		37.7284	60°	37.727799°
iteiii				-121.2746	71 °	-121.274252°
DWR ID	LMA-484					

Comment Code

Inspector Comment

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:578

Site Designation:LMA-484

Repair Type: Erosion Rating:Area of Concern Field Date:8/10/2017

Notes: Paved road on levee.



* Location

CR : Crown

LS: Land Side WS: Water Side

N/A: Not Applicable

A : Acceptable M : Minimally Acceptable U : Unacceptable

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence En: Enforcement

Levee Inspection Report By Mile - Fall 2019

Reclamation District No. 2075 McMullin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	7.45	11/21/2019 11/21/2019	Alberto De Leon

LM Start	5.24	Rating **	A/W	Issue No.		21 (cont)
LM End	5.29	Issue Type +	Ма	Location *		WS
Category	Suppleme	ental		GPS La	atitud	e/Longitude
Calegory				Start		End
Item	2017 Stor	m Damage		37.7284	60°	37.727799°
пеш				-121.2746	71 °	-121.274252 °
DWR ID	LMA-484					

Comment Code

Inspector Comment

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:578

Site Designation:LMA-484 Repair Type: Erosion Rating:Area of Concern Field Date:8/10/2017 Notes: Paved road on levee.

LM Start	5.24	Rating **	A/W	Issue No.	21 (cont)
LM End	5.29	Issue Type +	Ма	Location *	WS



Photo 3 of 3: LEVAL_FA_2019_578_4257.jpg



: Acceptable : Minimally Acceptable U : Unacceptable

N : Not Inspected/Rated C : Corrected

+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En: Enforcement

Levee Inspection Report By Mile - Fall 2019

Reclamation District No. 2075 McMullin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	7.45	11/21/2019 11/21/2019	Alberto De Leon

LM Start	5.26 Rating ** A/W		A/W	Issue No.		23		
LM End		Issue Type +	Ма	Location *	WS			
Category	Suppleme	GPS Latitude/Longitude						
Calegory				Start		End		
Item	2017 Stor	m Damage		37.72821	6°		0	
пеш		•			4 °		0	
DWR ID	LMA-33							
Comment Code								

Inspector Comment

Levee Evaluation Comments

Description: Site ID No:79 Site Designation:LMA-33 Repair Type: Erosion Rating:Area of Concern Field Date:6/8/2017

 Notes: no damage present

 LM Start
 5.26
 Rating **
 A/W
 Issue No.
 23 (cont)

 LM End
 Issue Type +
 Ma
 Location *
 WS



Photo 2 of 3: LEVAL_FA_2019_79_1335.jpg



A: Acceptable
M: Minimally Acceptable
U: Unacceptable

N: Not Inspected/Rated C: Corrected A/W: Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

Levee Inspection Report By Mile - Fall 2019

Reclamation District No. 2075 McMullin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	7.45	11/21/2019 11/21/2019	Alberto De Leon

LM Start	5.26	Rating **	A/W	Issue No.		23 (cont)			
LM End		Issue Type +	Ma	Location *	Location *				
Cotogony	Category				GPS Latitude/Longitude				
Calegory	ategory			Start		End			
Item	2017 Stor	m Damage		37.72821	3°		0		
пеш			-121.27443	4 °		0			
DWR ID	LMA-33								
	Comment Code								

Inspector Comment

Levee Evaluation Comments

Description: Site ID No:79

Site Designation:LMA-33 Repair Type: Erosion Rating:Area of Concern Field Date:6/8/2017 Notes: no damage present



LM Start	5.27	Rating **	A/W	Issue No.		26	
LM End		Issue Type +	Ob	Location *		LS	
Category	Supplemental			GPS Latitude/Longitude			
Category				Start		End	
Item	2017 Stor	m Damage		37.7280	38°		0
пеш				-121.2743	53°		0
DWR ID	LMA-34						

Comment Code

Inspector Comment

Levee Evaluation Comments

Description:

Site ID No:80

Site Designation:LMA-34

Repair Type: Seepage

Rating:Serious

Field Date:8/23/2017

Notes: This site was not visited for seepage, but an erosion site (LMA-33 & LMA-484) at the same location was visited. Sac rings had been placed in the orchard during last year's storm to contain the boils and can be seen in the photos of the other two.

No Photos

Levee Inspection Report By Mile - Fall 2019

Reclamation District No. 2075 McMullin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	7.45	11/21/2019 11/21/2019	Alberto De Leon

LM Start	5.28 Rating ** A/W		Issue No.		1			
LM End	5.29	Issue Type +	Ма	Location *				
Category				GPS Latitude/Longitude				
Calegory						End		
Item	DWR Eros	sion Survey		37.7279	33 °	37.727933°		
пеш				-121.2744	91 °	-121.274491°		
DWR ID	RD2075U0	1RM64.34						

Inspector Comment

Comment Code

Site ID: RD2075U01RM64.34

09/17/2019: No significant change observed.

09/13/2017: No significant change observed.

07/12/2016: No significant change observed.

08/28/2015: No significant change observed. Loose material is visible at the upper levee slope. The loose soil may have been caused by runoff.

08/18/2014: No significant change observed.

09/10/2013: No significant change observed.

09/13/2012: No significant change observed.

08/18/2011: No significant change observed. Some new material added to the water side levee slope, but the added material is loose and seems not helping the levee protection.

10/05/2010: No significant change observed. Levee slope has minimal vegetation and lacks rip rap protection. Sandy material found on the lower and middle slope is an undesirable material to have on a levee. 08/05/2010: Recommended for annual assessment and monitoring during flood events, per CLRO.

08/20/2009: No major change since last visit; site is located in an oxbow; slope surface consists of very sandy material; there is a tree on site leaning and with exposed tree roots; site is recommended as a local maintenance issue, per CLRO CES Evaluation 2008 Report; Eddy Cordoza from the district is aware of the site and is looking for recommendation; site is previously rated "U".

08/17/2007: Site is close to an irrigation pump inlet.

LM Start	5.28	Rating **	A/W	Issue No.	1 (cont)
LM End	5.29	Issue Type +	Ма	Location *	

Photo 1 of 3: SJR2019_RD2075U01RM64.34_1.jpg



Upstream view of the erosion site.

Photo 2 of 3: SJR2019_RD2075U01RM64.34_5.jpg



Close-up view of the site.

Location + Issue Type Ma: Maintenance Deficiency LS: Land Side N/A: Not Applicable Acceptable N : Not Inspected/Rated Minimally Acceptable Ob : Design & System Obsolescence WS: Water Side C : Corrected CR : Crown U : Unacceptable A/W: Acceptable but Monitor & Maintain En: Enforcement

Levee Inspection Report By Mile - Fall 2019

Reclamation District No. 2075 McMullin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	7.45	11/21/2019 11/21/2019	Alberto De Leon

LM Start	5.28	Rating **	A/W	Issue No.		1 (cont)
LM End	5.29	Issue Type +	Ма	Location *		
Category	Supplemental			GPS Latitude/Longitude		
Calegory	y			Start		End
Item	DWR Ero	sion Survey		37.72793	3°	37.727933°
item			-121.27449	11 °	-121.274491°	
DWR ID	RD2075U0	1RM64.34				

Inspector Comment

Comment Code

Site ID: RD2075U01RM64.34

09/17/2019: No significant change observed.

09/13/2017: No significant change observed.

07/12/2016: No significant change observed.

08/28/2015: No significant change observed. Loose material is visible at the upper levee slope. The loose soil may have been caused by runoff.

08/18/2014: No significant change observed.

09/10/2013: No significant change observed.

09/13/2012: No significant change observed.

08/18/2011: No significant change observed. Some new material added to the water side levee slope, but the added material is loose and seems not helping the levee protection.

10/05/2010: No significant change observed. Levee slope has minimal vegetation and lacks rip rap protection. Sandy material found on the lower and middle slope is an undesirable material to have on a levee. 08/05/2010: Recommended for annual assessment and monitoring during flood events, per CLRO.

08/20/2009: No major change since last visit; site is located in an oxbow; slope surface consists of very sandy material; there is a tree on site leaning and with exposed tree roots; site is recommended as a local maintenance issue, per CLRO CES Evaluation 2008 Report; Eddy Cordoza from the district is aware of the site and is looking for recommendation; site is previously rated "U".

08/17/2007: Site is close to an irrigation pump inlet.

Photo 3 of 3: SJR2019_RD2075U01RM64.34_6.jp	J
	k
W. N. T. F. F. P. B.	3/2
第26年1月16日在19日本的19日本的19日本的19日本的19日本的19日本的19日本的19日本的	
WINDSHIP STATES	
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APPLICATION OF THE PROPERTY OF	
	7
	4

Looking at the eroded levee slope.

LM Start	5.30	Rating **	М	Issue No.		40	
LM End	5.55	Issue Type +	Ma	Location *		WS	
Category	Earthen L	evee		GPS La	titud	le/Longitude	
Calegory	Sategory		Start		End		
Item	Vegetatio	n		37.7277	42 °	37.725010	٥
item				-121.2740	50°	-121.271120	٥
DWR ID	DWR_RD2	075_01_f _ 201	9_40				
		Comn	nent Coc	le			

V2 : Remove the wild growth other than native grasses from the levee slopes.

Inspector Comment

No Photos

*Location

LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

** Rating

A: Acceptable N: Not Inspected/Rated M: Maintenance Deficiency

M: Minimally Acceptable C: Corrected Ob: Design & System Obsolescence

AW: Acceptable but Monitor & Maintain En: Enforcement

Levee Inspection Report By Mile - Fall 2019

Reclamation District No. 2075 McMullin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	7.45	11/21/2019 11/21/2019	Alberto De Leon

LM Start	5.50	Rating **	М	Issue No.		41		
LM End	5.50	Issue Type +	Ma	Location *		WS		
Category	Earthen L	evee		GPS La	atitud	e/Longitude		
Calegory				Start		End		
Item	Trim / Thi	n Trees		37.7256	29°	37.725629°		
пеш				-121.2715	96°	-121.271596°		
DWR ID	DWR ID DWR_RD2075_01_f _ 2019_41							
		Comn	nent Coc	de				
T1 : Trim t	rees to at I	east five feet	above g	round level				
		Inspecto	or Comm	nent				

No Photos

Levee Inspection Report By Mile - Fall 2019

Reclamation District No. 2075 McMullin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	7.45	11/21/2019 11/21/2019	Alberto De Leon

LM Start	5.56	Rating **	М	Issue No.		54		
LM End	5.56	Issue Type +	En	Location *				
Supplemental			GPS Latitude/Longitude					
Category			Start		End			
ltom	DRAFT D	WR UCIP Fie	ld	37.7248	77°	37.724877°		
Item Study			-121.2710	25 °	-121.271025 °			
DWR ID	24740							
	Comment Code							

Inspector Comment

DS_ID:24740 FS_ID:50191 EP_NO: 3492

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 06/21/2016 Rock revetment placed along WS slope beneath and around pipe; this corrected the levee erosion but still unclear whether the cause of the erosion was addressed. I found no evidence of siphon breaker leakage cited previously. Eddy Cardoza of RD2075 mentioned he saw no leak in and around pipe when the levee slope was repaired. Crossing was been downgraded from Urgent to Non-Urgent. (K. Fazel - UCIP)11/13/2013 Huge erosion on waterside levee slope due to siphon breaker leakage. It is not 16-inch but 12-inch steel pipe. Pump not mounted on pile structure but mounted on concrete sump. Siphon breaker not in concrete riser but on steel pipe. Pipe is not 8 ft. below the crown but 4 ft below the crown. Looks original pipe was replaced with new crossing. Needs more information from LMA or DWR Inspector, (P. Amatva - DWR) FIELD_STRUCT_DESC: 12-inch asphalt coated steel drainage discharge pipe through the levee, 4 feet below the crown. Concrete cutoff wall. Pump mounted on a concrete sump in a drainage ditch approximately 200 feet off the landside (LS) toe. Siphon breaker on the apex of the pipe through the waterside (WS) slope. (Plans to replace the discharge pipe across the levee authorized under Permit No. 3492. 1960 - Reclamation District No. 2075, care of Eldred E. Brown, Secretary. Plans to replace a 10-horsepower pump and a 10-inch pipe with a larger 15-horsepower pump and a 14-inch steel discharge pipe authorized under Permit No. 3492-A, 1969 - Reclamation District No. 2075, care of Eldred E. Brown, Secretary). [Additional Reference(s): DWR Levee Log, 2005, 16-inch pipe referenced. USACE San Joaquin O&M Manual 3, December 1968, (HLM 5.52), 16-inch pipe referenced]. FS Date: 6/21/2016



WS view: siphon breaker on steel pipe on levee slope. Huge soil erosion due to siphon breaker leakage.

Levee Inspection Report By Mile - Fall 2019

Reclamation District No. 2075 McMullin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	7.45	11/21/2019 11/21/2019	Alberto De Leon

LM Start	5.56	Rating **	М	Issue No.		54 (cont)
LM End	5.56	Issue Type +	En	Location *		
Supplemental			GPS Latitude/Longitude			
Calegory	Category		Start		End	
Item		WR UCIP Fie	ld	37.7248	77 °	37.724877°
пеш	Study	Study			25 °	-121.271025°
DWR ID	24740					·

Inspector Comment

Comment Code

DS ID:24740 FS ID:50191 EP_NO: 3492

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 06/21/2016 Rock revetment placed along WS slope beneath and around pipe; this corrected the levee erosion but still unclear whether the cause of the erosion was addressed. I found no evidence of siphon breaker leakage cited previously. Eddy Cardoza of RD2075 mentioned he saw no leak in and around pipe when the levee slope was repaired. Crossing was been downgraded from Urgent to Non-Urgent. (K. Fazel - UCIP)11/13/2013 Huge erosion on waterside levee slope due to siphon breaker leakage. It is not 16-inch but 12-inch steel pipe. Pump not mounted on pile structure but mounted on concrete sump. Siphon breaker not in concrete riser but on steel pipe. Pipe is not 8 ft. below the crown but 4 ft below the crown. Looks original pipe was replaced with new crossing. Needs more information from LMA or DWR Inspector, (P. Amatva - DWR) FIELD_STRUCT_DESC: 12-inch asphalt coated steel drainage discharge pipe through the levee, 4 feet below the crown. Concrete cutoff wall. Pump mounted on a concrete sump in a drainage ditch approximately 200 feet off the landside (LS) toe. Siphon breaker on the apex of the pipe through the waterside (WS) slope. (Plans to replace the discharge pipe across the levee authorized under Permit No. 3492. 1960 - Reclamation District No. 2075, care of Eldred E. Brown, Secretary. Plans to replace a 10-horsepower pump and a 10-inch pipe with a larger 15-horsepower pump and a 14-inch steel discharge pipe authorized under Permit No. 3492-A, 1969 - Reclamation District No. 2075, care of Eldred E. Brown, Secretary). [Additional Reference(s): DWR Levee Log, 2005, 16-inch pipe referenced. USACE San Joaquin O&M Manual 3, December 1968, (HLM 5.52), 16-inch pipe referenced]. FS Date: 6/21/2016



LS view: pipe, pump and concrete sump in the drain ditch.

N: Not Inspected/Rated : Corrected A/W: Acceptable but Monitor & Maintain + Issue Type Ma: Maintenance Deficiency Ob : Design & System Obsolescence En: Enforcement

Levee Inspection Report By Mile - Fall 2019

Reclamation District No. 2075 McMullin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	7.45	11/21/2019 11/21/2019	Alberto De Leon

LM Start	5.56	Rating **	М	Issue No.		54 (cont)
LM End	5.56	Issue Type +	En	Location *		
Supplemental			GPS Latitude/Longitude			
Calegory	Category		Start		End	
Item		WR UCIP Fie	ld	37.7248	77 °	37.724877°
пеш	Study	Study			25 °	-121.271025°
DWR ID	24740					·

Inspector Comment

Comment Code

DS ID:24740 FS ID:50191 EP_NO: 3492

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 06/21/2016 Rock revetment placed along WS slope beneath and around pipe; this corrected the levee erosion but still unclear whether the cause of the erosion was addressed. I found no evidence of siphon breaker leakage cited previously. Eddy Cardoza of RD2075 mentioned he saw no leak in and around pipe when the levee slope was repaired. Crossing was been downgraded from Urgent to Non-Urgent. (K. Fazel - UCIP)11/13/2013 Huge erosion on waterside levee slope due to siphon breaker leakage. It is not 16-inch but 12-inch steel pipe. Pump not mounted on pile structure but mounted on concrete sump. Siphon breaker not in concrete riser but on steel pipe. Pipe is not 8 ft. below the crown but 4 ft below the crown. Looks original pipe was replaced with new crossing. Needs more information from LMA or DWR Inspector, (P. Amatva - DWR) FIELD_STRUCT_DESC: 12-inch asphalt coated steel drainage discharge pipe through the levee, 4 feet below the crown. Concrete cutoff wall. Pump mounted on a concrete sump in a drainage ditch approximately 200 feet off the landside (LS) toe. Siphon breaker on the apex of the pipe through the waterside (WS) slope. (Plans to replace the discharge pipe across the levee authorized under Permit No. 3492. 1960 - Reclamation District No. 2075, care of Eldred E. Brown, Secretary. Plans to replace a 10-horsepower pump and a 10-inch pipe with a larger 15-horsepower pump and a 14-inch steel discharge pipe authorized under Permit No. 3492-A, 1969 - Reclamation District No. 2075, care of Eldred E. Brown, Secretary). [Additional Reference(s): DWR Levee Log, 2005, 16-inch pipe referenced. USACE San Joaquin O&M Manual 3, December 1968, (HLM 5.52), 16-inch pipe referenced]. FS Date: 6/21/2016





LS view: closer view of pipe, pump and concrete sump in the drain ditch.

CR: Crown

Ma: Maintenance Deficiency A/W : Acceptable but Monitor & Maintain

+ Issue Type

Ob : Design & System Obsolescence

Page 35 of 42

En: Enforcement

Levee Inspection Report By Mile - Fall 2019

Reclamation District No. 2075 McMullin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	7.45	11/21/2019 11/21/2019	Alberto De Leon

LM Start	5.57	Rating **	С	Issue No.		22		
LM End	5.57	Issue Type +	Ma	Location *		LS		
Category Earthen Levee				GPS Latitude/Longitude				
Calegory				Start		End		
Item	Trim / Thi	n Trees		37.724795°		37.724795°		
пеш				-121.2709	35 °	-121.270935 °		
DWR ID DWR_RD2075_01_s _ 2018_22								
	Comment Code							
T1 · Trim +	roop to ot l	aget five foot	ahaya a	round loval				

T1: Trim trees to at least five feet above ground level.

Inspector Comment

No Photos

No Photos

LM Start	5.61	Rating **	М	Issue No.		43	
LM End	5.82	Issue Type +	Ма	Location *		LS	
Earthen Levee				GPS Latitude/Longitude			
Category				Start		End	
Item	Vegetatio	n		37.7243	71 °	37.721822°	
itein				-121.2706	47°	-121.268356 °	
DWR ID DWR_RD2075_01_f _ 2019_43							

Comment Code

V2: Remove the wild growth other than native grasses from the levee slopes.

Inspector Comment

LM Start	5.73	Rating **	M	issue No.		44
LM End	5.73	Issue Type +	Ma	Location *		LS
Category	evee	GPS Latitude/Longitude				
Calegory				Start		End
Item	Animal Co	ontrol		37.7227	63°	37.722763°
пеш				-121.2694	27°	-121.269427°
DWR ID	DWR_RD2	075_01_f _ 201	9_44			

Detines ** NA Jesus Ne

Comment Code A3: No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

Inspector Comment

No Photos

* Location

LS: Land Side N/A: Not Applicable

WS: Water Side

A : Acceptable M : Minimally Acceptable U : Unacceptable

N : Not Inspected/Rated C : Corrected

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence

En: Enforcement

Levee Inspection Report By Mile - Fall 2019

Reclamation District No. 2075 McMullin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	7.45	11/21/2019 11/21/2019	Alberto De Leon

LM Start	5.87	Rating **	A/W	Issue No.		28
LM End	6.33	Issue Type +	pe + Ma Location *			WS
Category				GPS Latitude/Longitude		
Calegory						End
Item	2017 Stor	m Damage		37.7217	10°	37.720960°
пеш				-121.2674	90°	-121.259830 °
DWR ID	LMA-485					

Inspector Comment

Comment Code

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:579

Site Designation:LMA-485 Repair Type: Erosion Rating:Area of Concern Field Date:8/10/2017

Notes: Berm present on LS. LMA 486 is combined with this site.

LM Start	5.87	Rating **	A/W	Issue No.	28 (cont)
LM End	6.33	Issue Type +	Ma	Location *	WS



Photo 2 of 3: LEVAL_FA_2019_579_4264.jpg



Levee Inspection Report By Mile - Fall 2019

Reclamation District No. 2075 McMullin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	7.45	11/21/2019 11/21/2019	Alberto De Leon

LM Start	5.87	Rating **	A/W	Issue No.		28 (cont)	
LM End	6.33	Issue Type +	Ма	Location *		WS	
Category	GPS La	titud	e/Longitude				
Calegory				Start		End	
Item	2017 Stor	m Damage		37.72171	0°	37.720960	0
пеш				-121.26749	00°	-121.259830	0
DWR ID	LMA-485						

Inspector Comment

Comment Code

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:579

Site Designation:LMA-485 Repair Type: Erosion Rating:Area of Concern Field Date:8/10/2017

Notes: Berm present on LS. LMA 486 is combined with this site.



LM Start	6.12	Rating **	С	Issue No.		34	
LM End	6.12	Issue Type +	Ma	Location *		LS	
Category Earthen Levee			GPS La	titud	e/Longitude		
Category				Start	End		
Item	Trim / Thi	n Trees		37.72247	'1 °	37.722471°	
item				-121.26322	21 °	-121.263221 °	
DWR ID	DWR_RD2	075_01_s _ 201	9_34				
Comment Code							

T1 : Trim trees to at least five feet above ground level.

Inspector Comment

No Photos

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Fall 2019

Reclamation District No. 2075 McMullin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	7.45	11/21/2019 11/21/2019	Alberto De Leon

LM Start	6.20	Rating **	A/W	Issue No.		27
LM End	6.33	Issue Type +	Ma	Location *	WS	
Category	Suppleme	ental		GPS Latitude/Longitude		
Calegory				Start		End
Item	2017 Stor	m Damage		37.72208	7°	37.720952°
пеш				-121.26186	3°	-121.259950°
DWR ID	LMA-486					

No Photos

Inspector Comment

Comment Code

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:580

Site Designation:LMA-486 Repair Type: Erosion Rating:Area of Concern Field Date:8/10/2017

Notes: This site is combined with LMA 485.

LM Start	6.37	Rating **	М	Issue No.		45	
LM End	6.55	Issue Type +	Ma	Location *		LS	
Category Earthen Levee			GPS Latitude/Longitude				
				Start		End	
Vegetation			37.720675°		37.718157°		
item				-121.2593	57°	-121.258543 °	
DWR ID	DWR_RD2	075_01_f _ 201	9_45				
Comment Code							

V2: Remove the wild growth other than native grasses from the levee slopes.

Inspector Comment

No Photos

* Location LS : Land Side N/A: Not Applicable

WS: Water Side CR : Crown

A : Acceptable M : Minimally Acceptable U : Unacceptable

N : Not Inspected/Rated C : Corrected

A/W : Acceptable but Monitor & Maintain

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence En: Enforcement

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Levee Inspection Report By Mile - Fall 2019

Reclamation District No. 2075 McMullin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	7.45	11/21/2019 11/21/2019	Alberto De Leon

LM Start	6.71	Rating **	М	Issue No.		46	
LM End	6.77	Issue Type +	Ma	Location *		LS	
Category	Earthen Levee			GPS Latitude/Longitude			
Calegory				Start		End	
Item	Vegetation			37.7157	61 °	37.715032°	
пеш	item		-121.2584	01 °	-121.258539°		
DWR ID	DWR_RD2	075_01_f _ 201	9_46				
		Comn	nent Coc	le			
V2 : Remove the wild growth other than native grasses from the levee slopes.							
Inspector Comment							

No Photos

LM Start	6.73	Rating **	М	Issue No.		47		
LM End	6.73	Issue Type +	En	Location *		WS		
Category	Cotagoni Earthen Levee			GPS Latitude/Longitude				
Calegory	Calegory			Start		End		
Item	Encroachments			37.71548	30°	37.715480°		
пеш				-121.25844	12°	-121.258442°		
DWR ID	DWR ID DWR_RD2075_01_f _ 2019_47							
Comment Code								
PR : Pruni	ngs							

Inspector Comment

No Photos

LM Start	6.79	Rating **	М	Issue No.		48	
LM End	6.79	Issue Type +	En	Location *		WS	
Category	Earthen Levee			GPS Latitude/Longitude			
Category						End	
Item	Encroach	ments		37.7146	37°	37.714637°	
item				-121.25870	04°	-121.258704°	
DWR ID	DWR_RD2	075_01_f _ 201	9_48			·	

No Photos

PR : Prunings

Inspector Comment

Comment Code

Levee Inspection Report By Mile - Fall 2019

Reclamation District No. 2075 McMullin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	7.45	11/21/2019 11/21/2019	Alberto De Leon

LM Start	6.84	Rating **	М	Issue No.		55
LM End	6.84	Issue Type +	En	Location *		
Catagony	Category Supplemental			GPS Latitude/Longitude		
Calegory				Start		End
Item		WR UCIP Fie	ld	37.7141	62 °	37.714162°
пеш	Study			-121.2592	27°	-121.259227°
DWR ID	24742					·

Inspector Comment

Comment Code

DS_ID:24742 FS_ID:50213 EP_NO: 4051

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 06/21/2016: Erosion repaired with rock revetment and crown regraded. Pipe is crushed and deformed on LS. PVC pipe has been removed. Crossing has been downgraded from Urgent to Non-Urgent.11/13/2013:- exposed deformed pipe on landside slope. Soil erosion also occured around the deformed pipe. Walkway at pump on LS toe in poor structural condition.- a temporary 12-inch PVC pipe also found on both sides of the levee.

FIELD_STRUCT_DESC: 12-inch steel drainage discharge pipe through the levee, 5.5 feet below the crown. Corrugated metal cutoff wall. Pump mounted over a concrete sump at the landside (LS) toe. Siphon breaker in a corrugated metal pipe (CMP) riser on the waterside (WS) shoulder. Ditch across the WS berm. 12-inch polyvinyl chloride (PVC) pipe through the levee, 1 foot below the crown, installed for emergency use during the 1986 floods, not found in 2016. (Plans for installation of a 10-inch drainage discharge pipe for a drainage pump over the levee authorized under Permit No. 4051, 1962 - Reclamation District No. 2075). [Additional Reference(s): DWR Levee Log, 2005, 10-inch pipe referenced. USACE San Joaquin O&M Manual 3, December 1968, (HLM 6.79), 10-inch pipe referenced].

FS Date: 6/21/2016

LM Start	6.84	Rating **	М	Issue No.	55 (cont)
LM End	6.84	Issue Type +	En	Location *	



WS view: CMP riser (bottom) on levee shoulder. Steel pipe (top) and temporary pvc pipe on levee slope.



WS view: siphon breaker in CMP riser on levee shoulder.

* Location

LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown

** Rating

A : Acceptable N : Not Inspected/Rated M: Maintenance Deficiency Ob: Design & System Obsolescence U: Unacceptable U: Unacceptable but Monitor & Maintain

** Rating

A : Not Applicable M: Not Inspected/Rated M: Maintenance Deficiency Ob: Design & System Obsolescence En: Enforcement

Levee Inspection Report By Mile - Fall 2019

Reclamation District No. 2075 McMullin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	7.45	11/21/2019 11/21/2019	Alberto De Leon

LM Start	6.84	Rating **	М	Issue No.		55 (cont)
LM End	6.84	Issue Type +	En	Location *		
Catagony	Category Supplemental			GPS Latitude/Longitude		
Calegory				Start		End
Item	DRAFT D	WR UCIP Fie	ld	37.7141	62 °	37.714162°
пеш	Study			-121.259227°		-121.259227°
DWR ID	24742					·

Inspector Comment

Comment Code

DS_ID:24742 FS_ID:50213 EP_NO: 4051

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 06/21/2016: Erosion repaired with rock revetment and crown regraded. Pipe is crushed and deformed on LS. PVC pipe has been removed. Crossing has been downgraded from Urgent to Non-Urgent.11/13/2013:- exposed deformed pipe on landside slope. Soil erosion also occured around the deformed pipe. Walkway at pump on LS toe in poor structural condition.- a temporary 12-inch PVC pipe also found on both sides of the levee.

FIELD_STRUCT_DESC: 12-inch steel drainage discharge pipe through the levee, 5.5 feet below the crown. Corrugated metal cutoff wall. Pump mounted over a concrete sump at the landside (LS) toe. Siphon breaker in a corrugated metal pipe (CMP) riser on the waterside (WS) shoulder. Ditch across the WS berm. 12-inch polyvinyl chloride (PVC) pipe through the levee, 1 foot below the crown, installed for emergency use during the 1986 floods, not found in 2016. (Plans for installation of a 10-inch drainage discharge pipe for a drainage pump over the levee authorized under Permit No. 4051, 1962 - Reclamation District No. 2075). [Additional Reference(s): DWR Levee Log, 2005, 10-inch pipe referenced. USACE San Joaquin O&M Manual 3, December 1968, (HLM 6.79), 10-inch pipe referenced].

FS Date: 6/21/2016



LS view: deformed pipe and soil erosion around it (marked bottom). Pipe and pump on pile structure in drain ditch.

LM Start	6.84	Rating **	М	Issue No.		42		
LM End	7.03	Issue Type +	Ma	Location *		LS		
Category Earthen Levee				GPS Latitude/Longitude				
Calegory						End		
Vegetation Item			37.714122°		37.713533°			
item				-121.259267°		-121.262667 °		
DWR ID DWR_RD2075_01_f _ 2019_42								
Comment Code								

V2 : Remove the wild growth other than native grasses from the levee slopes.

Inspector Comment

No Photos

* Location

LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

** Rating

A: Acceptable N: Not Inspected/Rated M: Minimally Acceptable C: Corrected Ob: Design & System Obsolescence

U: Unacceptable A: Acceptable but Monitor & Maintain

** Rating

A: Acceptable N: Not Inspected/Rated M: Ma: Maintenance Deficiency Ob: Design & System Obsolescence

En: Enforcement